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March 6, 2003

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Washington, D.C. 20231

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Re: U.S. Patent Application No.: 09/9452659/  
For: *Modified Polypeptides Stabilized in a Desired Conformation and Methods  
for Producing Same*  
Inventors: Springer, Timothy A. *et al.*  
Filed: August 31, 2001  
Our Ref. No.: CBN-002CP

Dear Sir:

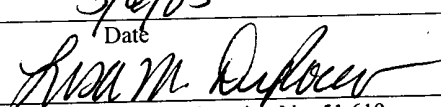
I enclose herewith for filing in the above-identified application the following:

1. Information Disclosure Statement;
2. PTO Form 1449;
3. Copies of references cited in PTO Form 1449 (24);
4. A copy of the International Search Report; and
5. A Return Postcard.

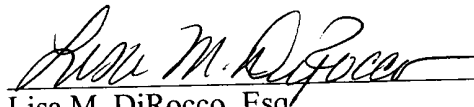
No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any other necessary fees due in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

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Date

  
Lisa M. DiRocco, Esq., Registration No. 51,619

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

  
Lisa M. DiRocco, Esq.  
Registration No. 51,619  
Attorney for Applicants



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

16

In re the application of: Springer, Timothy A. *et al.*

Serial No.: 09/945265

Filed: August 31, 2001

For: *Modified Polypeptides Stabilized in a Desired Conformation and Methods for Producing Same*

Attorney Docket No.: CBN-002CP

Group Art Unit: 1644

Examiner: Maher M. Haddad

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*March 6, 2003*

Date of Signature and of Mail Deposit

By:

*Lisa M. DiRocco*

Lisa M. DiRocco, Esq.  
Registration No. 51,619  
Attorney for Applicants

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants and their Attorney are aware of the following publications and information, listed on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. A copy of each cited publication is enclosed. A portion of the references cited on the PTO Form 1449 (A1, A3, A4, A6, A6, A7, A9, A10, A11, B1, B2, B3, B4, B5, B6, B7 and B9) were cited in an International Search Report mailed August 08, 2002 during the prosecution of PCT/US01/27227, which corresponds to the above-referenced application, and are enclosed as well.

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This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

In accordance with 37 CFR §1.97(c)(2) and §1.17(p), please charge the \$180.00 submission fee to our Deposit Order Account No. 12-0080. Please charge any necessary additional fees or credit any overpayments to our Deposit Order Account No. 12-0080.

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

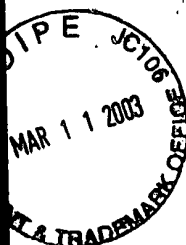


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Date: March 6, 2003

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	A1	WO 95/17412 A1	6/95	WO		

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

-	A2	Dickeson SK <i>et al.</i> Ligand recognition by the I domain-containing integrins. Cell Mol Life Sci. 1998 Jun;54(6):556-66
	A3	Hazes, B <i>et al.</i> Model building of disulfide bonds in proteins with known three-dimensional structure. Protein Eng. 1988 Jul;2(2):119-25
✓	A4	Huth, J <i>et al.</i> NMR and mutagenesis evidence for an I domain allosteric site that regulates lymphocyte function-associated antigen 1 ligand binding. Proc Natl Acad Sci U S A. 2000 May 9;97(10):5231-6
-	A5	Larson RS, <i>et al.</i> Primary structure of the leukocyte function-associated molecule-1 alpha subunit: an integrin with an embedded domain defining a protein superfamily J Cell Biol. 1989 Feb;108(2):703-12
✓	A6	Lee, Jie-Oh <i>et al.</i> Crystal structure of the A domain from the alpha subunit of integrin CR3 (CD11b/CD18). Cell. 1995 Feb 24;80(4):631-8
-	A7	Lee, Jie-Oh <i>et al.</i> Two conformations of the integrin A-domain (I-domain): a pathway for activation? Structure. 1995 Dec 15;3(12):1333-40
✓	A8	Leitinger B, <i>et al.</i> The regulation of integrin function by Ca(2+). Biochim Biophys Acta. 2000 Dec 20;1498(2-3):91-98
✓	A9	Li, Rui <i>et al.</i> Two functional states of the CD11b A-domain: correlations with key features of two Mn2+-complexed crystal structures. J Cell Biol. 1998 Dec 14;143(6):1523-34
✓	A10	Lu, C <i>et al.</i> An isolated, surface-expressed I domain of the integrin alphaLbeta2 is sufficient for strong adhesive function when locked in the open conformation with a disulfide bond. Proc Natl Acad Sci U S A. 2001 Feb 27;98(5):2387-92
✓	A11	Lu, C <i>et al.</i> Locking in alternate conformations of the integrin alphaLbeta2 I domain with disulfide bonds reveals functional relationships among integrin domains. Proc Natl Acad Sci U S A. 2001 Feb 27;98(5):2393-8
✓	A12	Ohashi Y, <i>et al.</i> Three monoclonal antibodies against human LFA-1 alpha and beta chains with different biological activities. Tohoku J Exp Med. 1992 Dec;168(4):599-610

Examiner

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OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)		
—	B1	Orchekowski RP, <i>et al.</i> AlphaMbeta2 (CD11b/CD18, Mac-1) integrin activation by a unique monoclonal antibody to alphaM I domain that is divalent cation-sensitive. J Leukoc Biol. 2000 Nov;68(5):641-9
—	B2	Oxvig, C <i>et al.</i> Conformational changes in tertiary structure near the ligand binding site of an integrin I domain. Proc Natl Acad Sci U S A. 1999 Mar 2;96(5):2215-20
—	B3	Petruzzelli L, <i>et al.</i> Activation of lymphocyte function-associated molecule-1 (CD11a/CD18) and Mac-1 (CD11b/CD18) mimicked by an antibody directed against CD18
—	B4	Sali A, <i>et al.</i> Comparative protein modelling by satisfaction of spatial restraints. J Mol Biol. 1993 Dec 5;234(3):779-815
—	B5	Shimaoka M, <i>et al.</i> Computational design of an integrin I domain stabilized in the open high affinity conformation. Nat Struct Biol. 2000 Aug;7(8):674-8
—	B6	Shimaoka M, <i>et al.</i> Reversibly locking a protein fold in an active conformation with a disulfide bond: integrin alphaL I domains with high affinity and antagonist activity in vivo. Proc Natl Acad Sci U S A. 2001 May 22;98(11):6009-14
—	B7	Shimaoka M, <i>et al.</i> Conformational regulation of integrin structure and function. Annu Rev Biophys Biomol Struct. 2002;31:485-516
—	B8	Stewart M, <i>et al.</i> Leukocyte integrins. Curr Opin Cell Biol. 1995 Oct;7(5):690-6
—	B9	Qu A <i>et al.</i> Crystal structure of the I-domain from the CD11a/CD18 (LFA-1, alpha L beta 2) integrin. Proc Natl Acad Sci U S A. 1995 Oct 24;92(22):10277-81
—	B10	Fischer, A <i>et al.</i> Prevention of graft failure by an anti-HLFA-1 monoclonal antibody in HLA-mismatched bone-marrow transplantation. Lancet. 1986 Nov 8;2(8515):1058-61.
—	B11	Sanchez-Madrid, F <i>et al.</i> Three distinct antigens associated with human T-lymphocyte-mediated cytotoxicity: LFA-1, LFA-2, and LFA-3. Proc Natl Acad Sci U S A. 1982 Dec;79(23):7489-93
—	B12	Morimoto et al. A novel epitope of the LFA-1 antigen which can distinguish killer effector and suppressor cells in human CD8 cells. Nature. 1987 Dec 3-9;330(6147):479-82
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